How to Conduct an Effective Interview; A Guide to Interview Design in Research Study

Authors

Hamed Taherdoost
University Canada West

hamed.taherdoost@gmail.com
Vancouver, Canada

Abstract

Interviews are one of the most promising ways of collecting qualitative data through establishment of a communication between researcher and the interviewee. Researcher in a face to face, phone or online conversation tries to understand and explore respondents' opinions and behavior in a specific subject. Despite the significant importance of interviews to collect data in a research study, it may look challenging to design an effective interview that provides unbiased, enough and accurate data. This article provides the common steps of designing and conducting effective interviews and lists the main ethical issues that researchers, interviewers, and participants need to consider in the interview process of a research study.

Key Words

Data Collection, Interview Design, Data Collection Methods, Academic Research Paper, Effective Interview.

I. What is an Interview?

The interview is defined as the method of asking questions to gain both qualitative and quantitative data (Taherdoost, 2021). In quantitative questions, interviewees select their choices in a limited range of responses provided by the researcher, on the other hand, qualitative questions aim to obtain the interviewee's descriptions to a specific question. Although there are different methods for qualitative data collection such as text or document reviews, diaries, and participant observation, interviews are the most commonly used techniques for primary qualitative data collection as they provide a natural and comfortable atmosphere for the participants (Taherdoost, 2021).

Therefore, interviews are used to obtain in-depth information about the participants' experiences by interpreting them. This interaction provides the opportunity of recording everything in their lives (Doody, 2013; Bolderston, 2012). In this method, the interviewer listens to the participants' stories carefully and records his/her understanding of them to gain the perceptions, thoughts, and ideas of the individuals. Therefore, the main advantage of the interview method is that the participants can express their point of view in private, freely, and without being limited to the specified frameworks. However, it should be also considered that researchers need to identify a suitable flow of questions to gain the main object of the research study. Interviewees also need to rely on interpersonal techniques to encourage individuals to participate in the process efficiently. This method can be also time-consuming in case the researchers and interviewers are not prepared and do not consider all necessary points for the process. For doing this, the most important steps to be mentioned in this process ranging from providing the question to the ethical issues are reviewed in this article (Bolderston, 2012).

II. WHAT ARE TYPES OF INTERVIEWS?

Interview could be classified from two different perspective of how to conduct the interview and its format. Figure 1 shows the categories and these techniques that are described in more detail in the following.
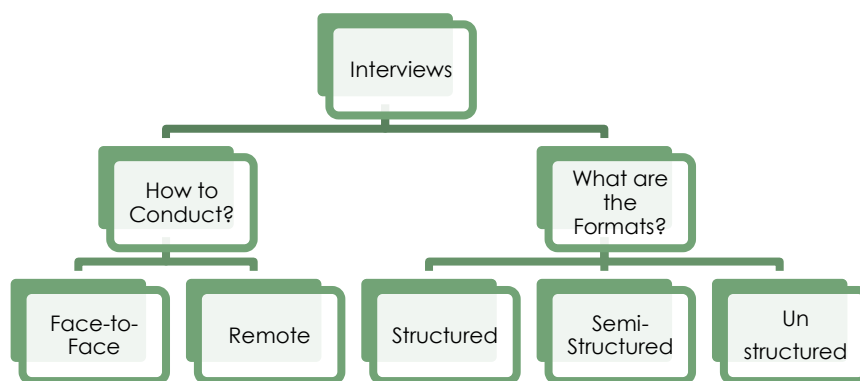

FIGURE. 1. INTERVIEW TECHNIQUES

2.1. Different Format of Interview

Generally, interviews can be conducted in three formats including structured, unstructured, and semi-structured interviews. Researchers can apply one of these formats, although the unstructured and semi-structured types are commonly used for qualitative data collection.

2.1.1. Structured Interviews

In this method ordering and wording of the questions are similar for all interviewees. Thus, a specific protocol is used during scheduled interviews. These techniques offer different merits as they can be helpful

to minimize the biases and the required time. The conductor can control the process better, and also the results can be coded and analyzed easier. However, this method does not prepare the chance of any elaboration since they act as spoken questionnaires. Therefore, some researchers only recommend this format when sociodemographic information needs to be extracted (Doody, 2013). These formats are not recommended for qualitative research.

2.1.2. Un-Structured Interviews

Interviews cannot be considered to be un-structured totally. Even in unstructured formats, an interview guide is required to lead them to the object of the study. However, the difference is that the interview questions are asked with more flexibility and indirectly. Therefore, the interviewer starts with some broad questions based on the research question and continues with the more specific ones; however, these questions are based on the answers provided by the interviewees. That is to say, here thymes are comprised in the guides instead of specific questions.

This process provides rich and in-depth information; however, it can be time-consuming and add biases as well. Analyzing and processing data is also more complicated and can be faced with several difficulties. Researchers need to be also experts to develop and design suitable questions among the interviews based on the participants.

Through this method, researchers are not restricted to a set of questions, and they can gain data from unknown events and background information. However, unstructured methods are not applicable when researchers are not experienced enough. They need to communicate with participants, listen actively, note carefully, and ask specific questions based on situations that represent the need for facilitating their skills (Doody, 2013; DiCicco-Bloom, 2006).

2.1.3. Semi-Structured Interviews

Semi-structured techniques include the majority of interviews for collecting qualitative data. In this method, interviews are based on using predetermined questions; however, the interviewers are also free to ask more questions for clarifications when required. The main guide is provided based on similar questions and interviewees' orders.

In addition, interviewers can modify the wording of the questions, their orders, and explore new paths to gain the research purpose. This method, therefore, provides the opportunity of gathering rich data, and emerging new concepts; however, requires expert conductors who can explore when and how to ask questions promptly as well as gathering the responses without missing any data (Doody, 2013; DiCicco-Bloom, 2006).

2.2. How to Conduct Interview

All three types of interview formats can be carried out by using manifold ways. For this purpose, researchers can conduct their interviews face-to-face by using personal or group interviews such as focus group techniques. Remote techniques by using telephone or computer using e-mail can be also carried out (Bolderston, 2012).

2.2.1. Face-to-Face Interviews

Face-to-face interviews are mainly based on one-to-one or in-person interviews in the presence of both interviewee and the interviewer. However, this can be also carried out in the type of group interviews with more than one participant. This type is often known as focus group interviews that facilitate a discussion on a specific topic to collect narrative data. That is to say, here the session is not conducted for decision-making or problem-solving purposes. To sum, in this method "group members influence each other with their comments, and participants may form opinions after considering the views of others. Tapping into this interpersonal dialogue can help identify the common experience and shared concerns".

2.2.2. Remote Interviews

These interviews can be conducted both by telephones and computers. As an example, telephone interviews are suitable when there are geographical limits between the participants and interviewers. They also are appropriate choices for qualitative surveys and opinion or social policy studies. They possess different merits as they are time-consuming and cheaper than face-to-face methods. On the other hand, computer-based interviews use online platforms such as videoconferencing, chat rooms, E-mail, etc. These formats can also benefit further processing of results (Bolderston, 2012; Bampton, 2002; Knox, 2009).

Telephone interviews are not recommended by traditional researchers who consider this type as an inferior method of gathering data; however, this viewpoint is not supported by many qualitative researchers who believe that the comparisons between remote interviews and face-to-face ones reject the former viewpoint (Farooq, 2015). After defining the interview types and categories, in the following sections, the steps for preparing an interview, and the phases of conducting a successful interview (Figure 2) are discussed.
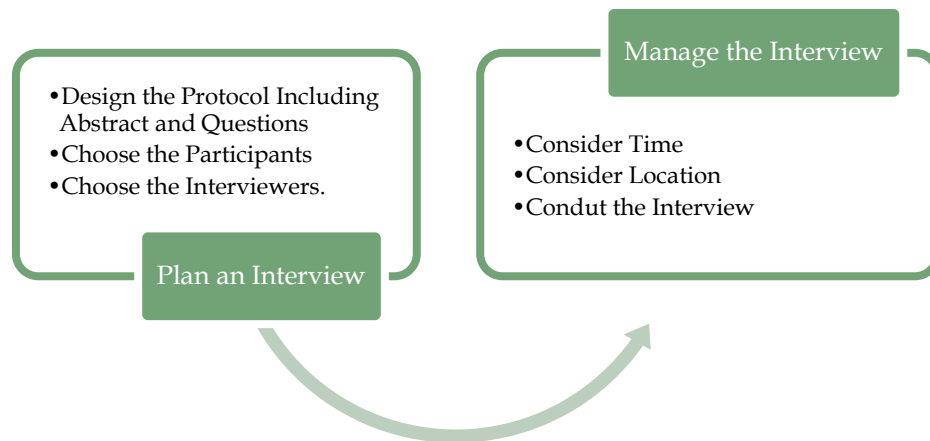
FIGURE. 2. INTERVIEW PROCESS

III. HOW TO DESIGN/PLAN AN INTERVIEW?

To conduct a successful interview and gain useful data which addresses the research question, it is necessary to get prepared first. This process includes different steps from the preparation of the research protocol to choosing target participants which are described below (Bolderston, 2012). Some steps can be conducted in different orders based on researchers' preferences.

3-1- Building the Interview Protocol

This protocol aims to outline different points. The format of these protocols can be affected by the level of structure that researchers aim to follow in their interviews (Knox, 2009). It first outlines the aim of the study, and then what steps should be followed in the interview. Besides, the main ethical considerations are also included. Adjusting a detailed protocol before the interview can help the researchers completely dominate the interview sessions and determine the main and follow-up questions which are required to address the purpose of the study. For this purpose, researchers should mention the following notes in the interview protocol:

- Describe what is the research question.
- List the personnel included in the research
- Prepare an introduction and the list of ethical considerations
- Review what processes the interviewer should follow
- List the primary and follow up questions
- Consider a "Thank You" statement

The above-listed points are the common contents of an interview protocol. However, more details can be added to the protocols including literature reviews, and summaries of data analyses methods

(Bolderston, 2012).

It should be also noted that the researcher can choose whether to send a copy of the protocol before the interview session or not. It depends on what is considered to be suitable for the study. Sending a copy of the protocol makes the participant familiar with the questions and affects answers. Besides, some participants can avoid participating in the study when they face the questions before the interview, and it is the responsibility of the researcher to convince them (Knox, 2009). On the other hand, developing a guide that can lead in case of facing challenges can be beneficial. For example, the descriptions of complex and technical phrases, interviewees reserved, how much detailed answers are required, and how to use therapeutic support can be included in the guide (Doody, 2013).

A. Writing a Preamble

This section is prepared as an introduction to the research study, its objectives, and how the researcher aims to use and disseminate the information obtained from the interview session. This part should be included in the first section of the interview to inform participants about their rights ranging from withdrawing the interview or protecting and securing their identities. Respondents are free to answer the questions as much as they want. However, they should be informed that they will not be judged for any opinion or comment. This section can be prepared in a written format or read to the participant orally (Bolderston, 2012). This part is considered as a part of ethical considerations which are discussed more in the final section.

B. Designing Interview Questions

To design the set of primary and follow-up questions, you first need to detect and consider the research question. In the first step, the broad area that the interview covers should be determined by considering the research questions. For this purpose, the researcher should examine what he/she wants to hear from the participant. This helps the researchers to perceive the general direction of the questions, and then they can recognize and list more detailed topics (Doody, 2013). To sum, the researchers gain the opportunity of addressing the research questions by the answers provided for the questions, and this makes designing of the questions a main process (Knox, 2009). Now, the researcher is ready to write the interview questions.

First, the researcher should consider different types of questions they need. For example, questions in qualitative studies are open-ended that cover different topics including demographics, feelings, knowledge, opinions, experiences, etc. (Doody, 2013). There are general points that should be applied when writing and ordering the interview questions. Although, the order and wording of the questions can be changed during the interview session based on the interviewer's decision by considering levels of the structure which are discussed in detail before. The interview questions can be divided into three main categories.

Main Questions focus on the main purpose of the research and are often asked directly after the preamble. *Planned follow-up* questions also known as *probes* are used to get detailed answers about more specific subjects. These questions can also assist the participants to be directed to main issues of the research. Finally, other *follow-up questions* which are *spontaneous* ones are provided after the interviewer listens to the first set of answers. These are applied to get more validity by encouraging the interviewees to prepare more clarifications about what the questions/issues mean to them (Bolderston, 2012). Furthermore, the important points of writing suitable interview questions and ordering them are listed in the following:

- **Being relevant:** researchers should dedicate enough time to think about the questions that are needed to address purpose of study and prepare them before the interview sessions.
- **Writing simple and short questions:** researchers should write simple and short to prevent any issue for the understanding of the participants for example considering the educational level of the participants. Therefore, jargon and technical languages are not recommended.
- **Using comprehensible language:** employment of a comprehensible language avoids raising questions and biases.
- **Using prompts and probes questions:** these make the participants more encouraged for elaboration or explanation. The probes can be applied by follow-up questions to get more details and clarifications. For example, when researchers use phrases such as 'could you tell me more about this?' or 'what do you feel about that?' they are considered as probes. Prompts, on the other hand, are mainly suggested for abstract questions and complicated ones.
- **Writing a final question:** this question can be designed as 'do you have anything else to say?' which can help to add final details or forgotten points to the answers. These answers can be so revealing and adding these kinds of questions is critical.
- **Starting from easy questions:** place the more challenging questions that may discourage participants to continue at the end of the interviews (Doody, 2013; Bolderston, 2012; Turner III, 2010).

C. Pretesting the Protocol

Researchers are required to conduct discussion sessions with different groups such as co-researchers and supervisors as well as potential interviewees including similar qualities with the main participants to examine the primary interview protocol and guides. Furthermore, it is important to conduct a pilot test with a small number of participants after writing the questions and designing the format of the protocol.

This critical step can help researchers to conduct a productive interview that meets their research questions, and the comments obtained from those groups of people can help to develop interviews. These comments can be added based on different aspects such as weaknesses in the wording of questions and facing confusing questions (Doody, 2013; Bolderston, 2012; Turner III, 2010). Finally, the researcher should examine questions by considering the comments and then modify them where required. In other

words, researchers need to determine whether the questions cover different aspects of the study such as the following points or not:

- ✓ Whether questions can get them the data they need to address the research question.
- ✓ Whether questions are enough understandable.
- ✓ Whether the flow of the questions in similar topics or from one topic to another one is appropriate.
- ✓ Whether language is suitable considering the educational levels of the participants.
- ✓ Whether the set of questions is comprehensive, or a topic is missed (Bolderston, 2012).

3.2. Interviewee Selection and Preparation

In this process, researchers should consider different aspects based on the object of their study to select the target participants. This is an important process that can overshadow the results and validity of the research directly (Taherdoost, 2016a). For example, if researchers aim to detect the main issues of the people with higher education in developing countries, they need to choose participants with the characteristics meeting their objectives. For more clarification, the following points should be applied in both selection and preparation steps by the interviewees.

A. Choosing Participants

Researchers are required to select the most appropriate people as target samples for their study since it helps them to obtain the most complete and effective answers (Slade and Sergent, 2018). Initially, determining the interviewees depends on the research intention. Therefore, the process of sampling should be conducted purposefully. In other words, samples need to be selected as a rational cross-section of individuals (Taherdoost, 2016b).

The number of participants varies based on the type of research. In quantitative studies, researchers often determine the sample size using random or probability sampling to get the optimal number of participants that can address the valid inferences required to generalize the results (Taherdoost, 2016b). Therefore, sample sizes can be even extremely large. In contrast, qualitative research does not necessarily intend to generalize the findings. Thus, it is important to consider the insights and preciseness of the participants about the topic, and keep the sample size small. The number of participants can be considered from 10 individuals to a maximum of 50-60 in the majority of interviews (Bolderston, 2012). Another important consideration regarding the interviewees is their compositions. The composition of the samples can be selected in manifold types based on what researchers prefer for their study. These compositions can be based on selecting single individuals, couples, families, groups, or a combination of them [Gubrium, 2012 #15].

B. Preparing Interviewees

Researchers can initially contact participants to determine the ones who are willing to participate in the study, the times that they are available, and their contact information if possible. They can prepare participants with a different range of information from the topic and the aim of the study to the main questions they need to answer. They can also share the information provided in the research preamble before the session. For doing this, researchers can use an information sheet including these details as well as the schedule, and also inform them regarding the length of the interview. The general principles of the interview can be also described before the interview time as well (Bolderston, 2012; Doody, 2013).

3.3. Interviewer Characteristics

Many researchers emphasize the quality of questions as the main reason for the success of the interviews. However, the role of the interviewers, their skills and characteristics should not be overlooked since they affect the results of the study.

First of all, interviewers need to be good listeners. Since the final transcript obtained from an interview session indicates the participants' answers mainly, interviewers need to listen attentively and not miss any point. On the other hand, a small part of the text includes the interviewer's pitfalls which are mainly about specific points. Interviewers, therefore, need to possess other skills to add those points appropriately when required. For example, the interviewers may add some points to correct or educate the interviewees just when they face a major misunderstanding. They can also participate in the conversation to help the participant pay attention to the main subject, and not become sidetracked.

Furthermore, interviews can be turned into counseling sessions by a skilled interviewer as well. Some summarizing comments regarding the participants' feeling about an event can make the sense of being understood or heard to the participants. Also, to lead these counseling sessions, the interviewers need to be trained in "reflective conversation" or "empathic listening" subjects. Another point is that interviewers need to consider enough time for the interviewees to think and answer, and not jump directly to the next question. Using appropriate and effective follow-up questions is another skill that interviewers should be expert in. They also should gain specific skills which help them to rephrase the questions and move away from the topics where/when needed.

In addition, the interviewers should avoid biases. For example, when facing a subject that they feel engaged and close to it, they need to remember their task is to listen and understand the viewpoint of the participants while staying unbiased. On the other hand, they require to avoid positive or negative responses to answers. The words such as "excellent" and "that's great" can overshadow the participant's responses; however, neutral responses like "interesting" can be added. It is also important to consider the personal characteristics such as the interviewer's confidence, making eye contact, and their good relationship with the interviewees to gain effective results (Knox, 2009; Doody, 2013). Finally, novices should enhance their skills over time by listening back to an interview and transcribing it before the next interview. This process

helps them to recognize when the best time is to respond to the answers (Doody, 2013).

IV. MANAGING THE INTERVIEW SESSION

To manage an interview successfully, the conductors of the sessions require to consider different points. They need to determine the approximate time, site/location, and how to conduct the interview carefully. These points are discussed in the following.

4.1. Timing

Researchers are expected to consider time as an important factor before interview sessions. Different factors determine the appropriate time for the interview sessions. These factors can be listed in the following:

- ✓ Type of the interview: phone interviews can be conducted quickly, in contrast, focus group types are longer in terms of time.
- ✓ Type of the questions: the level of complexity of the questions can be an important factor to consider.
- ✓ The number of key questions: this factor can directly overshadow the time factor.
- ✓ Previous experiences: whether the interviewees possess any previous interview with the interviewer or not.
- ✓ Group size: this affects the time in group discussions.
- ✓ Discussion level: How many details the researcher needs.
- ✓ Preparation time: this factor should be considered to provide enough time for participants for clarification and confirmation (Bolderston, 2012).

4.2. Site or Location

The importance of the interview location is one of the most important factors which should not be underestimated. The interviewer, commonly, dictates the site where the interview takes palace [Gubrium, 2012 #15]. A quiet and private interview location can avoid interrupting interview sessions which can affect the participant's intent, focus, and finally the whole data collection process. For this purpose, the convenience of the location is required to be mentioned as a critical point. Furthermore, conducting the sessions in neutral venues instead of family commitments and locations with household obligations that can lead to distractions are more preferred (Doody, 2013). On the other hand, the location can affect the interview's formality level. For example, casual interviews can be conducted in the street; however, more formal locations should be selected for asking more directed questions [Gubrium, 2012 #15].

4.3. Conducting Interviews

First, the schedule should be noted before the sessions; otherwise, it leads to distraction of the participants. Then, when the interview starts, the interviewers need to explain the points provided in the preamble, as discussed before, to the participants to make them informed regarding their rights, aim, and format of the session (Doody, 2013). In this step, the interviewer is expected to consider how to present well in the interview session. It is recommended to decide how to present themselves based on the initial contact with the interviewees to make a better connection. Therefore, whether the participant is an old woman, a young man, etc. can overshadow the way interviewers talk and act during the interviews. It is also recommended to consider the trust of the participants as another important factor that should be gained by the interviewers in the first step [Harvey, 2011 #4]. Then, asking questions can be started. To record answers, interviewers can use manifold ways such as recording the session using instruments that require agreement of participants, writing notes in the middle of interviews that may distract them and writing notes afterward the session which may miss some details.

Also, some challenges can be faced in this step. For example, interviewers should remember to return to some questions, and they also need to be very focused during the session. On the other hand, they need to ask the final question to ensure no information is forgotten and appreciate the interviewees for their participation in the study (Doody, 2013). In the final step, gathering feedback from the participants is recommended. This feedback can be beneficial not only in the pilot testing but also in real sessions. This can help in many aspects, for example, the researcher can identify whether a subject is overlooked and needs follow-up studies, and how they can improve the sessions [Harvey, 2011 #4]. In addition, common mistakes in interviews are listed by Slade and Sergent (2018) in the following:

- ✓ Avoid a considerable number of focusing questions;
- ✓ Do not ignore the emotion of participants;
- ✓ Do not refuse to return to the participants for more information;
- ✓ Always use an introduction and build a relationship with the participant;
- ✓ Avoid interruptions during the interview;
- ✓ Avoid focusing on just close-ended questions (Slade and Sergent, 2018).

Finally, all these points can affect the response rate (number of achieved responses divided by the total number of the possible responses based on the selected sample). Furthermore, different researchers introduced manifold factors can affect the response rate as well. As the impact of some factors is not justified by others in some studies, some general ones that can positively affect the response rate are listed in the following

- ✓ Interviewer's confidence;
- ✓ Making a good relationship with the participants;
- ✓ Contacting the interviewees before the sessions and persuading them;

- ✓ Training interviewers;
- ✓ Preferring face-to-face interviews where possible [Gubrium, 2012 #15].

V. ETHICAL ISSUES

Some ethical considerations are discussed before and more additional points are explained here as well. Generally, ethical points consider privacy and confidentiality concerns, as well as informed consent (Bolderston, 2012). Ethical issues are conducted to ensure that the collected data in the interview will not harm the participant in any way. Important ethical considerations are discussed in the following:

- Risks and benefits that the participants may face should be clarified.
- Questions should be adjusted to avoid causing any important mental or emotional issues for the participants since always some levels of mental or psychological harms from sensitive questions are possible.
- Participants should always be informed regarding the right of retracting any data that they want to be eliminated.
- The confidentiality of information should be provided to the extent which is allowed by laws. That is to say, information such as abuse, threats, and crimes can be revealed (Bolderston, 2012).
- Avoiding the participants' exploitation is another important point to consider.
- The anonymity of the participants should be also respected when the study aims to gather sensitive information.
- The interviewers who are informed about all these aspects should sign written consent provided to show their agreement to be involved in the study.
- A third party should approve the questions to examine all ethical considerations are respected (DiCicco-Bloom, 2006; Slade and Sergent, 2018).

VI. CONCLUSION

Interviews are one of the most promising ways of collecting qualitative data in a research study. Several considerations are required to be mentioned by the researchers or interviewers to conduct an effective interview. In this article, the design of the interview protocol was discussed including different sections from the introduction part to the questions. Then, it is emphasized that researchers should be aware of the importance of participant selection and the role of the interviewers in an interview session. Furthermore, interview sessions should be managed and conducted in the best way by prior scheduling, and ethical issues should be considered.

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Authors' Biography

Hamed Taherdoost is an award-winning leader and R&D professional. Hamed is a founder of Hamta Group and Faculty member at University Canada West. He was lecturer at IAU and PNU universities, scientific researcher, R&D and Academic Manager at IAU, Research Club, MDTH, NAAS, Tablokar, and Hamta Academy. Hamed has authored over 130 scientific articles in peer-reviewed international journals and conference proceedings (h-index = 29; i10-index = 53), as well as eight book chapters and seven books in the field of technology and research methodology. He is the author of the Handbook of Research Skills and his current papers have been published in Behaviour & Information Technology, Electronics, Computers, Information and Computer Security, Electronics, Annual Data Science, Cogent Business & Management, Procedia Manufacturing, and International Journal of Intelligent Engineering Informatics. He has authored a series of articles in the field of Research Methodology.

He is a Senior Member of the IEEE, IAEEEE, IASED & IEDRC, Working group member of IFIP TC and Member of CSIAC, ACT-IAC, and many other professional bodies. Currently, he is involved in several multidisciplinary research projects among which includes studying innovation in information technology & web development, people's behavior, and technology acceptance.